

UNESCO/POLAND CO-SPONSORED FELLOWSHIPS PROGRAMME 2018

List of Invited Member States per region and field of research as determined by the Polish authorities

Project No.	FIELD OF RESEARCH/PROJECT TITLE (Number of Fellowships)	LIMIT OF AGE	ACADEMIC REQUIREMENT <i>Be proficient in reading and writing in English.</i>
01	Biomedical Engineering (4 projects) GPU-based acceleration of diffusion magnetic resonance imaging. (1)	no more than 30 years of age	B.Sc. or M.Sc. degree in Biomedical Engineering, electrical engineering or computer science (01) Experience in C++ programming language, strong knowledge in numerical methods, statistical signal processing and basic knowledge in GPU programming (CUDA or OpenCL).
02	Multimodal physiological measurements for recognition of human daily activity. (1)		(02) General knowledge in computer usage and programming (C++, Java etc.), electronic equipment, signal and image processing, human physiology and measurements. Scientific and technical reading and writing in English and experience with Matlab will also be welcome.
03	A multicamera visual system for continuous pulse tracking in human. (1)		(03) General knowledge in computer usage and programming (C++, Java etc.), electronic equipment, signal and image video recording and transmission system, human physiology and measurements. Scientific and technical reading and writing in English and experience with Matlab will also be welcome.
04	Analysis of noise sources and predication to their influence on digital electrocardiogram. (1)		(04) Candidates should have a general knowledge in computer usage and programming (C++, Java etc.), electronic equipment, signal and image processing, statistics, human physiology and measurements. Scientific and technical reading and writing in English and experience with Matlab will also be welcome.
05	Geodesy and Cartography, geomatics (2 projects) Monitoring of sediments and bottoms of water reservoirs used for industrial purposes. (1)	no more than 30 years of age	B.Sc. or M.Sc. degree in geodesy or geomatics or geoinformation (05) Have a predisposition to work in a team, general knowledge in geodesy, the ability to develop geodetic measurements.
06	Modern methods of diagnostics of the geometry of excavations providing underground mines. (1)		(06) Have a predisposition to work in a team, no contraindications to work in underground mining plants; general knowledge in geodesy, the ability to develop geodetic measurements.
07	Renewable Energy, solar energy (2 projects) Characterization of Solar Radiation components: Global, Direct and Diffuse. (1)	no more than 30 years of age	B.Sc. or M.Sc. degree in Eng. (07) Computers general knowledge (Excel) is required and general knowledge about Solar energy.
08	Effect of the temperature and dust deposition on the photovoltaic module performance.(1)		(08) Computers general knowledge (Excel) is required and general knowledge about Solar energy.
09	Applied Geology (1 project) New generation of integrated petrophysical interpretation for Fracture Basement Reservoir in offshore.	no more than 38 years of age	B.Sc. or M.Sc. degree General knowledge in petroleum geology, well logging.
10	Materials Science, ceramic matrix composites (2 projects) Nonoxide ceramics composites. (1)	no more than 25 years of age	B.Sc. or M.Sc. degree (10) General knowledge in material science or ceramic technology.
11	Wear resistant ceramic composites (1)		(11) Same as above
12	Transport Engineering (2 projects) Availability problems in transportation systems and devices (1)	no more than 35 years of age	B.Sc. or M.Sc. degree (12) Be able to write computer programs, for example, be familiar with CAD/CAM/CAE; have a general knowledge related to transportation programmes, including safety and reliability problems.
14	Transport System Telematics. (1)		(14) Candidates should have mechanical/ transport engineering/ automation degree; be familiar with transport system telematics and automation; be able to analysis of reliability, maintainability and availability of machine maintenance, as well as modeling.
13	Decision Engineering (1 project) Problem base engineering.	no more than 34 years of age	B.Sc. or M.Sc. degree Be able to use MS Office and drawing programs, have a general knowledge related to engineering problems.
15	Transport Engineering, (1 project) Transportation technology system and devices.	no more than 35 years of age	B.Sc. or M.Sc. degree Be familiar with CAD/ CAM/ CAE programs, have a general knowledge related to transportation problems, including modeling and monitoring.

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16 28	Mining Engineering (2 projects) Availability problems in transportation systems and devices Selected aspects of operation in mining industry. The Study programme will include selected mining issues, including: rock mechanics and rock engineering, chosen aspects of underground exploitation, especially underground mining methods, geomechanics problems related to underground mining.	no more than 25 years of age	B.Sc. or M.Sc. degree (16) Have degree in mining or mining related fields. (28) Degree in mining related fields.
17 18 19 20	Geology (4 projects) Pegmatites from Central Africa: Mineralogical and geochemical study Geochemical and mineralogical investigation of Carbonatite complexes and associated alkaline rocks in south and southeastern Asia Characteristic and genesis of Cu-deposits of South and Southeastern Asia Design of compressed air energy storages in salt caverns Antimony and related mineral deposit in south and southeastern Asia	no more than 35 years of age	B.Sc. or M.Sc. degree (17) General knowledge of Kibara belt Geology as well as geology of Central Africa; be familiar with EMPA and EDX analyses; be a student of economic geology; general knowledge on granite pegmatites and their geochemistry; Own samples for studying are REQUIRED. (18) General knowledge of Pakistan Geology as well as geology of southern Asia and ore deposits; be familiar with EMPA and EDX analyses; be a student of economic geology; general knowledge on carbonatite and alkaline intrusions deposits; Own samples for studying are REQUIRED. (19) General knowledge of Pakistan Geology as well as geology of southern Asia and ore deposits; be familiar with EMPA and EDX analyses; be a student of economic geology; general knowledge on volcanic hosted copper deposits; Own samples for studying are REQUIRED. (20) General knowledge of Pakistan Geology as well as geology of southern Asia and ore deposits; be familiar with EMPA and EDX analyses; be a student of economic geology; general knowledge on volcanic hosted copper deposits; Own samples for studying are REQUIRED.
21 22 23 27	Geology, mineralogy, geochemistry (4 projects) Tin deposit in Central Asia. Pb-Zn deposit in South East Asia. Chromite deposit in South East Asia. REE deposit in South East Asia.	no more than 35 years of age	B.Sc. or M.Sc. degree (21) General knowledge in geology, mineralogy, geochemistry, mineral deposit. Candidate without samples will be not accepted. (22) (Same as above) Candidates should include and specify in the application form the list of samples. (23) (Same as 21) (27) General knowledge in geology, mineralogy, geochemistry, mineral deposit.
24 26	Mineralogy, geochemistry, economic geology (2 projects) Stratiform Lead Zinc deposit in South Asia Stratiform copper deposit in South Asia	no more than 35 years of age	B.Sc. or M.Sc. degree (24) General knowledge in geology, mineralogy, geochemistry, mineral deposit. Should mention the list of samples in the application form. (26) (Same as above)
25	Geology, mineralogy, geochemistry, economic geology (1 project) The distribution and composition of ore minerals forming secondary Sn, W, Nb-Ta deposits in Central Africa	no more than 35 years of age	B.Sc. or M.Sc. degree (25) General knowledge in geology, mineralogy, geochemistry, mineral deposit. Candidate without samples will be not accepted.
29	Automatic Control and Robotics (1 project) Innovative intelligent and autonomous decision support systems.	no more than 35 years of age	B.Sc. or M.Sc. degree in Computer Science, Mathematics, Automatic Control, Robotics or Computational Physics/ Astrophysics/ Biology (29) Excellent programming skills and experience (C++/C#/Python/Java/PHP, database programming), a good working knowledge of Matlab, and analytical thinking are prerequisites to be fulfilled by the candidates. Interests and preliminary knowledge in one or more of following fields: multicriteria optimization, forecasting, statistics, autonomous systems, including mobile robots and autonomous web crawlers, will be welcome. Pre-existing knowledge in neurosciences will be required. Social communication skills and good teamwork record will be important assets.

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30	Computer Vision, embedded systems, FPGA, SoC (System on Chip), GPU (1 project) <i>Embedded implementation of selected vision algorithms using heterogeneous Zynq SoC (System on Chip) or embedded GPU devices.</i>	no more than 35 years of age	B.Sc. or M.Sc. degree in degree in Computer Science, electronics or automatic controls and robotics. <i>general knowledge in computer science (mainly programming in C/C++/Python/Matlab/OpenCV and general algorithms design), basic skills in computer vision, embedded system (ARM processor programming and Linux OS), FPGA devices (e.g. VHDL or Verilog, Xilinx FPGA devices, Xilinx Zynq devices, Xilinx tools like ISE, Vivado, SDK) or embedded GPU (OpenCL, CUDA). Only basic of computer science is mandatory, however others will greatly help with finishing the project (no additional time for self-studying this subject will be required).</i>
31	Drilling Engineering (1 project) <i>Drilling and Hydraulic Fracturing.</i>	no more than 40 years of age	B.Sc. or M.Sc. degree preferably in petroleum, earth engineering, physics, mathematics or computer science. <i>Be able to solve problems using mathematical methods.</i>
32	Economic Sociology and Economics (1project) <i>Interrelations between new technologies and social, economic life in globalizing world.</i>	no more than 35 years of age	B.Sc. or M.Sc.; MA degree in humanities or social sciences or economics. <i>General knowledge in world economics</i>
33	Mining Machines (1 project) <i>Selected problems in exploitation of mining machines.</i>	no more than 35 years of age	B.Sc. or M.Sc. degree in degree in engineering, Mining Devices.
34	Automation in Mining (1 project) <i>Automation in mining machines and devices.</i>	no more than 35 years of age	B.Sc. or M.Sc. degree studies in Mining Devices.
35	Geotourism, geology (1 project) <i>Assessment of geotouristics values of selected geological objects in the developing countries.</i>	no more than 35 years of age	B.Sc. or M.Sc. degree in degree <i>General knowledge in geology, geography, tourism, geotourism, environment protection.</i>
	35 projects for 40 fellowships		

Please refer to the list of invited Member States entitled to submit applications hereunder.

List of Invited Member States (115)

AFRICA

(46 Member States)

- Angola
- Benin
- Botswana
- Burkina Faso
- Burundi
- Cameroon
- Cape Verde
- Central African Republic
- Chad
- Comoros
- Congo
- Côte d'Ivoire
- Democratic Republic of the Congo
- Djibouti
- Equatorial Guinea
- Eritrea
- Ethiopia
- Gabon
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Kenya
- Lesotho
- Liberia
- Madagascar
- Malawi
- Mali
- Mauritius
- Mozambique
- Namibia
- Niger
- Nigeria
- Rwanda
- Sao Tome and Principe
- Senegal
- Seychelles
- Sierra Leone
- Somalia
- South Africa
- Swaziland
- Togo
- Uganda
- United Republic of Tanzania
- Zambia
- Zimbabwe

ARAB STATES

(2 Member States)

- Iraq
- Syrian Arab Republic(the)

ASIA AND THE PACIFIC

(36 Member States)

- Afghanistan
- Bangladesh
- Bhutan
- Brunei Darussalam
- Cambodia
- China
- Fiji
- India
- Indonesia
- Iran (the Islamic Republic of)
- Kazakhstan
- Kiribati
- Kyrgyzstan
- Lao People's Democratic Republic
- Malaysia
- Maldives
- Mongolia
- Myanmar
- Nauru
- Nepal
- Niue
- Pakistan
- Palau
- Papua New Guinea
- Philippines
- Samoa
- Sri Lanka
- Tajikistan
- Thailand
- Timor-Leste
- Tonga
- Turkmenistan
- Tuvalu
- Uzbekistan
- Vanuatu
- Viet Nam

LATIN AMERICA AND THE CARIBBEAN

(31 Member States)

- Argentina
- Barbados
- Belize
- Bolivia (Plurinational State of)
- Brazil
- Chile
- Colombia
- Costa Rica
- Cuba
- Dominica
- Dominican Republic
- Ecuador
- El Salvador
- Grenada
- Guatemala
- Guyana
- Haiti
- Honduras
- Jamaica
- Mexico
- Nicaragua
- Panama
- Paraguay
- Peru
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago
- Uruguay
- Venezuela (Bolivarian Republic of)